THE CLAIMS

Claims 1-22 and 24-46 are pending in the instant application. Claims 1-22 and 24-26 were previously presented. Claims 27-46 are new claims. Claims 23 have been previously cancelled. Claims 1, 9, 17, 27 and 37 are independent claims. Claims 2-8, claims 10-16, claims 18-22 and 24-26, claims 28-36 and claims 38-46 depend directly or indirectly from claims 1, 9, 17, 27 and 37, respectively. Claims 1-4, 6-7, 9-22 and 24-25 are amended to clarify the claim language for further prosecution. The Applicant respectfully submits that the claims define patentable subject matter in view of the following remarks.

Listing of claims:

1. (Currently Amended) A method for providing load balancing in a hybrid wired/wireless local area network, the method comprising:

receiving at least one polling message from an access device by at least one of a plurality of access points;

responsive to said at least one polling message, determining a load on each one of said plurality of access points; and

sending said determined load of said each one of said plurality of access points to said access device, wherein said access device re-establishes

communication with one of said plurality of access points based on said sent determined load of said each one of said plurality of access points.

2. (Currently Amended) The method according to claim 1, comprising interpreting said at least one polling message by said at least one of said plurality of access points, which is located in an operating range of said access device.

3. (Currently Amended) The method according to claim 2, comprising selecting an access point from said plurality of access points having a least load and based on a received signal strength of said plurality of access points.

4. (Currently Amended) The method according to claim [[3]]1, comprising selecting said one of said plurality of access points, which comprises having a least load by said access device to provide service.

5. (Previously Presented) The method according to claim 1, comprising:

sending said received at least one polling message from said at least one of a plurality of access points to a switch using a messaging protocol message; and

receiving said at least one polling message by said switch.

6. (Currently Amended) The method according to claim 2, comprising determining at least a̲n̲ a̲g̲g̲r̲e̲g̲a̲t̲e̲ load on at least a portion of said plurality of access points.

7. (Currently Amended) The method according to claim 6, comprising sending information corresponding to said determined a̲g̲g̲r̲e̲g̲a̲t̲e̲ load to at least a portion of said plurality of access points using a messaging protocol message.

8. (Previously Presented) The method according to claim 7, wherein comprising redistributing a load on said at least a portion of said plurality of access points.

9. (Currently Amended) A ~~machine-readable storage, having stored thereon a computer program~~ c̲o̲m̲p̲u̲t̲e̲r̲-̲r̲e̲a̲d̲a̲b̲l̲e̲ m̲e̲d̲i̲u̲m̲ f̲o̲r̲ s̲t̲o̲r̲i̲n̲g̲ a̲ c̲o̲m̲p̲u̲t̲e̲r̲ p̲r̲o̲g̲r̲a̲m̲ f̲o̲r̲ e̲x̲e̲c̲u̲t̲i̲o̲n̲ b̲y̲ c̲o̲m̲p̲u̲t̲e̲r̲,̲ having at least one code section for providing load management in a hybrid wired/wireless local area network, the at least one code section executable by a ~~machine~~ c̲o̲m̲p̲u̲t̲e̲r̲ for causing the ~~machine~~ c̲o̲m̲p̲u̲t̲e̲r̲ to perform the steps comprising:

receiving at least one polling message from an access device by at least one of a plurality of access points;

responsive to said at least one polling message, determining a load on each one of said plurality of access points; and

sending said determined load of said each one of said plurality of access points to said access device, wherein said access device re-establishes communication with one of said plurality of access points based on said sent determined load of said each one of said plurality of access points.

10. (Currently Amended) The ~~machine-readable storage~~ computer-readable medium according to claim 9, ~~comprising~~ wherein said at least one code section comprises code for interpreting said at least one polling message by said at least one of said plurality of access points, which is located in an operating range of said access device.

11. (Currently Amended) The ~~machine-readable storage~~ computer-readable medium according to claim 10, ~~comprising~~ wherein said at least one code section comprises selecting an access point from said plurality of access points having a least load and based on a received signal strength of said plurality of access points.

12. (Currently Amended) The ~~machine-readable storage~~ computer-readable medium according to claim [[11]]9, ~~comprising~~ wherein said at least one code

section comprises code for selecting said one of said plurality of access points,
which comprises having a least load by said access device to provide service.

13. (Currently Amended) The machine-readable storage computer-readable
medium according to claim 9, comprising wherein said at least one code section
comprises code for:

sending said received at least one polling message from said at least one of
a plurality of access points to a switch using a messaging protocol message; and

receiving said at least one polling message by said switch.

14. (Currently Amended) The machine-readable storage computer-readable
medium according to claim 10, comprising wherein said at least one code section
comprises code for determining at least an aggregate load on at least a portion of
said plurality of access points.

15. (Currently Amended) The machine-readable storage computer-readable
medium according to claim 14, comprising wherein said at least one code section
comprises code for sending information corresponding to said determined
aggregate load to at least a portion of said plurality of access points using a
messaging protocol message.

16. (Currently Amended) The ~~machine-readable storage~~ computer-readable medium according to claim 15, ~~comprising~~ wherein said at least one code section comprises code for redistributing a load on said at least a portion of said plurality of access points.

17. (Currently Amended) A system for providing network management in a hybrid wired/wireless local area network, the system comprising:

at least one receiver of at least one of a plurality of access points, ~~adapted~~ operable to receive at least one polling message from an access device;

at least one controller ~~adapted~~ operable to determine a load on each one of said plurality of access points in response to said at least one polling message; and

at least one transmitter ~~adapted~~ operable to send said determined load of said each one of said plurality of access points to said access device, wherein said access device re-establishes communication with one of said plurality of access points based on said sent determined load of said each one of said plurality of access points.

18. (Currently Amended) The system according to claim 17, wherein said at least one controller is ~~adapted~~ operable to interpret said at least one polling message, said at least one controller being associated with at least one of said

plurality of access points that is located in an operating range of said access device.

19. (Currently Amended) The system according to claim 18, wherein said at least one controller is ~~adapted~~ operable to select an access point from said plurality of access points having a least load and based on a received signal strength of said plurality of access points.

20. (Currently Amended) The system according to claim [[19]]17, wherein said at least one controller is ~~adapted~~ operable to select said one of said plurality of access points, which comprises ~~having~~ a least load by said access device to provide service.

21. (Currently Amended) The system according to claim 17, wherein said at least one transmitter is ~~adapted~~ operable to send said received at least one polling message from said at least one of a plurality of access points to a switch using a messaging protocol message.

22. (Currently Amended) The system according to claim 21, wherein said at least one receiver is ~~adapted~~ operable to receive said at least one polling message by said switch.

23. (Cancelled)

24. (Currently Amended) The system according to claim 17, wherein said at least one controller is ~~adapted~~ operable to send information corresponding to ~~said~~ an aggregate determined load to at least a portion of said plurality of access points using a messaging protocol message.

25. (Currently Amended) The system according to claim 24, wherein said at least one controller is ~~adapted~~ operable to redistribute a load on said at least a portion of said plurality of access points.

26. (Previously Presented) The system according to claim 17, wherein said at least one controller is one or more of: a bandwidth management controller, a quality of service controller, a load balancing controller, a session controller and a network management controller.

27.   (New) A method for communication, the method comprising:

transmitting a polling message from a mobile station in a hybrid wired/wireless local area network, wherein said transmitted polling message causes one or more of a plurality of access points that receives said transmitted polling message to determine its corresponding load;

receiving from said one or more of said plurality of access points, said determined corresponding load for said one or more of said plurality of access points; and

re-establishing communication by said mobile station with one of said plurality of access points based on said received determined corresponding load for said one or more of said plurality of access points.

28.   (New) The method according to claim 27, comprising re-establishing communication by said mobile station with said one of said plurality of access points based on a received signal strength of said one or more of said plurality of access points.

29.   (New) The method according to claim 27, comprising selecting said one of said plurality of access points for said re-establishing of said communication based on said determined load and a RSSI associated with one of said plurality of access points.

30.   (New) The method according to claim 29, comprising selecting said one of said plurality of access points having a least load for said re-establishing of said communication.

31.   (New) The method according to claim 30, comprising broadcasting said polling message from said mobile station within said hybrid wired/wireless local area network.

32.   (New) The method according to claim 31, wherein said broadcasted polling message is received by a switch within said hybrid wired/wireless local area network.

33.   (New) The method according to claim 32, wherein said switch determines an aggregate load on plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted polling message.

34.   (New) The method according to claim 33, wherein said switch reconfigures said one or more of said plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted polling message.

35.   (New) The method according to claim 27, wherein a load on said one or more of said plurality of access points is redistributed based on one or both of

said determined corresponding load of said one or more of said plurality of access points, and said transmitted polling message.

36.   (New) The method according to claim 27, wherein an aggregate bandwidth of said one or more of said plurality of access points is optimized based on one or both of said determined corresponding load of said one or more of said plurality of access points, and said transmitted polling message.

37.   (New) A system for communication, the system comprising:

one or more processors in a mobile station, said or more processors are operable to transmit a polling message from said mobile station in a hybrid wired/wireless local area network, wherein said transmitted polling message causes one or more of a plurality of access points that receives said transmitted polling message to determine its corresponding load;

said or more processors are operable to receive from said one or more of said plurality of access points, said determined corresponding load for said one or more of said plurality of access points; and

said or more processors are operable to re-establish communication by said mobile station with one of said plurality of access points based on said received determined corresponding load for said one or more of said plurality of access points.

38.   (New) The system according to claim 37, wherein said or more processors are operable to re-establish said communication by said mobile station with said one of said plurality of access points based on a received signal strength of said one or more of said plurality of access points.

39.   (New) The system according to claim 37, wherein said or more processors are operable to select said one of said plurality of access points for said re-establishing of said communication based on said determined load and a RSSI associated with one of said plurality of access points.

40.   (New) The system according to claim 39, wherein said or more processors are operable to select said one of said plurality of access points having a least load for said re-establishing of said communication.

41.   (New) The system according to claim 40, wherein said or more processors are operable to broadcast said polling message from said mobile station within said hybrid wired/wireless local area network.

42.   (New) The system according to claim 41, wherein said broadcasted polling message is received by a switch within said hybrid wired/wireless local area network.

43.   (New) The system according to claim 42, wherein said switch determines an aggregate load on plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted polling message.

44.   (New) The system according to claim 43, wherein said switch reconfigures said one or more of said plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted polling message.

45.   (New) The system according to claim 37, wherein a load on said one or more of said plurality of access points is redistributed based on one or both of said determined corresponding load of said one or more of said plurality of access points, and said transmitted polling message.

46.   (New) The system according to claim 37, wherein an aggregate bandwidth of said one or more of said plurality of access points is optimized based on one or both of said determined corresponding load of said one or more of said plurality of access points, and said transmitted polling message.